

Science, Technology and Patents Statistics

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Main Science and Technology Indicators

Purpose

To publish biannually the most commonly used indicators on science and technology on an internationally comparable basis. The database and publication are regularly updated with 70 (paper publication) to 110 (electronic publication) data series presenting resources devoted to R&D and measures of output and the impact of S&T activities.

Objectives and outputs

This biannual publication provides a set of indicators that reflect the level and structure of the efforts undertaken by OECD Member countries and 8 non-member economies in the field of science and technology. These data include final and provisional results as well as forecasts established by government authorities. The indicators cover the resources devoted to research and development, patent families, technology balance of payments and international trade in highly R&D intensive industries. Also presented are the underlying economic series used to calculate these indicators. Series are presented for the last seven years for which data are available.

Publications

Main Science and Technology Indicators

Databases

Main Science and Technology Indicators (MSTI)

Main Developments for 2003

General aspects:

No major changes.

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Research and Development (R&D) Statistics

Purpose

To provide internal and external users with statistics on R&D expenditures and personnel and to ensure, through appropriate methodological work, the international comparability of corresponding national statistics.

Objectives and outputs

Management and/or development of internationally comparable statistics on resources devoted to R&D in Member countries and in eight non-member economies based on the OECD international methodology for R&D survey, the "Frascati Manual". Diffusion of S&T statistics and corresponding metadata via "Basic R&D Statistics" and improved "Main S&T Indicators" OECD publications and the on-line OECD "R&D Sources and Methods database". Improving comparability of R&D expenditures by Industry by developing and publishing the ANBERD database. The country coverage of OECD S&T databases and publications is being expanded to include comparable S&T indicators and statistics for non-member economies such as China, Russia, Singapore, Chinese Taipei and Latin American countries. The international R&D survey will be launched beginning of 2003.

Publications

Basic R&D Statistics - BRDS

Databases

S&T Databases: GERD, DEFENSE-GERD, PERS, BERD, DIRDE, BEMP, PRDE, HERD, HEMP, OBJBUD, PE-INST-GE, HCPERS.

Main Developments for 2003

General aspects:

Use of ISCED classes for the classification of R&D personnel by level of formal qualification; more data collection on characteristics of R&D personnel measured in Head Count, notably on sex; revision in the industrial classification of BERD; change classification by socio-economic objectives to use the NABS classification (Eurostat).

Revised classification by type of institution, notably for the Government and the Business enterprise sectors.

Revised and more detailed classification for Domestic performed R&D funding from overseas and for National R&D funding going overseas.

Addition to the R&D Database of one or two more non-member economies included in the "Main Science and Technology Indicators" publication.

Data collection:

The content and presentation of the OECD R&D questionnaire has been revised according to agreed revisions in the "Frascati Manual" and specific recommendations from the discussion on the revision of the content of the OECD R&D questionnaire at the June 2002 meeting of the WP of NESTI.

Data management:

Use of ISCED classes for the classification of R&D personnel by level of formal qualification.

Creation of a separate dataset related to more detailed characteristics of R&D personnel measured in Head Count (HCPERS).

Change classification by socio-economic objectives to use the NABS classification (Eurostat).

Revised classification by type of institution.

Revised and more detailed classification for R&D funding from overseas and for National R&D funding going overseas.

Addition to the R&D database of other Non member economies as their R&D data become available for publication in "Main Science and Technology Indicators".

Dissemination:

For 2004, only the electronic publication will be prepared.

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Sources and Methods for Research and Development (R&D) Statistics

Purpose

To meet demand for country-specific and item-specific methodology, this database relates principally to R&D as reported by the units performing the R&D in line with the standard methodology for R&D statistics recommended by OECD in the Proposed Standard Practice for Surveys of Research and Experimental Development - Frascati Manual (OECD).

Objectives and outputs

The database provides detail on methods used in the Member countries and eight non-member economies when compiling the R&D data reported to OECD in the framework of the International Survey of the Resources devoted to R&D by OECD countries, underlining both current and historical national specificities of the data stored in the OECD STI/EAS R&D database. The sources and methods are regularly updated as part of the International Survey of the Resources devoted to R&D by OECD countries. The Secretariat has made this database available on line either through the NESTI-NET <http://appli1.oecd.org/sti/NESTI-NET.nsf/>, where delegates are able to consult, or on the OECD intranet, under Author Directorates, STI-information resources.

Selected metadata are regularly published in "Basic Research and Development Statistics" (annual electronic publication and paper edition every two years) as well as in "Main Science and Technology Indicators" (paper and electronic publication appearing twice yearly). This information was also used as input to the revision of the "Frascati Manual", the international standard methodology for the measurement of resources devoted to R&D.

Databases

R&D_SM database

Main Developments for 2003

General aspects:

Addition to the database of one or two more non-member economies included in the "Main Science and Technology Indicators" publication.

Topics to be revised or added following of the modification of the OECD international R&D survey implementing the 2002 Frascati Manual revision.

Data management:

To be made available on the OECD web site early 2003.

Addition of other Non member economies - those presented in Main Science and Technology Indicators - to the database.